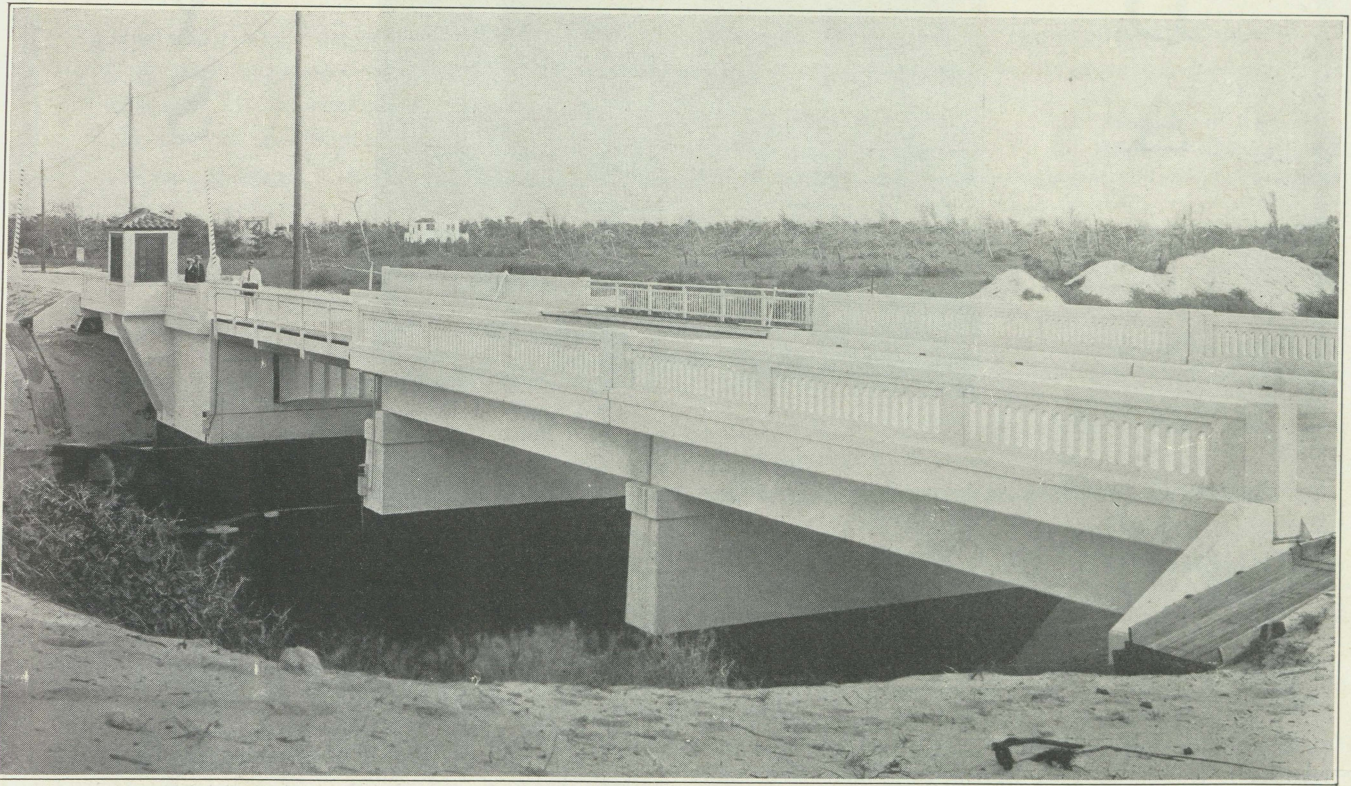


# FLORIDA HIGHWAYS

Official Bulletin of the State Road Department

Vol. IX

No. 4



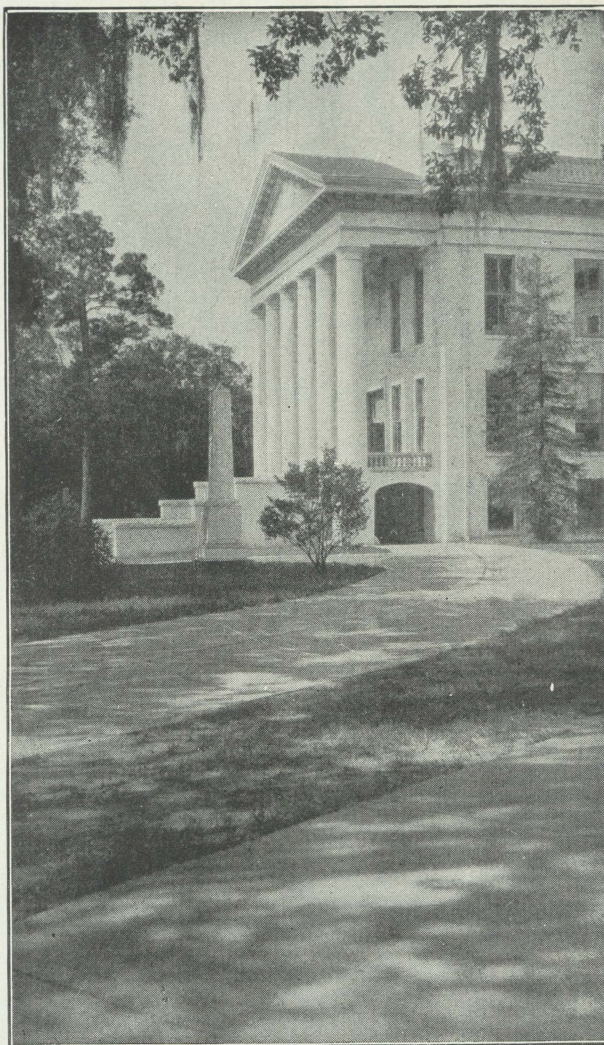
Federal Aid, Road 4, Palm Beach Canal Bridge

April 1932



# FLORIDA

Vol. IX  
No. 4



# HIGHWAYS

APRIL  
1932

## Transactions at Quarterly Meeting of State Road Department Held at Tallahassee, April 6, 1932

THE second quarterly meeting of the State Road Department for the year 1932 was held at Tallahassee on April 6 with the following members present: H. H. Wells, Chairman, W. A. Shands, Addison Logan and J. E. Lupfer. Mr. George B. Hills, Member of the Department, was prevented by illness from attending. B. M. Duncan, State Highway Engineer, Karl Roesch, Secretary, B. A. Meginiss, Attorney for the Department, and H. J. Morrison, Federal Highway Engineer, were also in attendance.

### Minutes Approved

On motion of Mr. Shands, seconded by Mr. Lupfer, the minutes of the meeting held at Tallahassee March 18th were duly approved.

### Employees As Candidates

On motion of Mr. Lupfer, seconded by Mr. Logan, the following resolution was adopted:

BE IT RESOLVED, that all employees of this Department who have announced, or who do announce, as candidates in the forthcoming Primary

Election, be relieved of service by this Department, and that no persons shall be employed during such candidacy.

### Project 63-A—Claim of Thomas H. Chapman

The Attorney for the Department presented to the members a letter from counsel for Thomas H. Chapman claiming compensation and damages on account of right-of-way and drainage ditches on Project 63-A, Broward County. The suggestion was made by counsel for Mr. Chapman that the matter of this claim be submitted to arbitration.

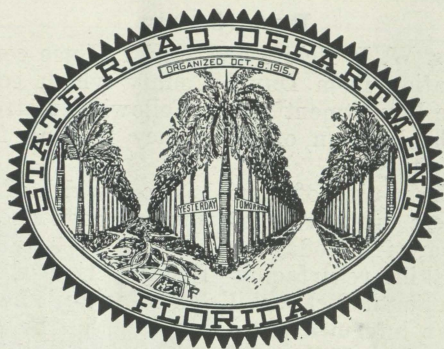
On motion of Mr. Shands, seconded by Mr. Logan, the following resolution was adopted:

BE IT RESOLVED, that the matter of the claim of Thomas H. Chapman on Project 63-A be referred to Mr. Lupfer and the Attorney for the Department for investigation and report.

### State Road 19—Jefferson County

On motion of Mr. Shands, seconded by Mr. Lupfer, the following resolution was adopted:





# Florida Highways

Published Monthly  
Official Bulletin of the State Road Department

## PERSONNEL OF DEPARTMENT

H. H. WELLS (*Chipley*), *Chairman*  
(*Official Residence, Tallahassee.*)

ADDISON LOGAN, <i>Tampa</i>	}	<i>Members</i>
W. A. SHANDS, <i>Gainesville</i>		
GEORGE B. HILLS, <i>Jacksonville</i>		
J. E. LUPFER, <i>Kissimmee</i>		
KARL ROESCH, <i>Tallahassee, Secretary</i>		

## PERSONNEL OF EMPLOYEES IN GENERAL CHARGE OF THE WORK OF THE DEPARTMENT

### Engineering Division

B. M. Duncan, Tallahassee.....State Highway Engineer  
L. K. Cannon, Tallahassee.....Ass't. State Highway Engineer  
W. I. Nolen, Tallahassee.....Bridge Engineer  
W. L. Thorpe, Gainesville.....Supt. of Equipment

### Division Engineers

DIVISION OF TESTS.....H. C. Weathers, Gainesville  
DIVISION OF SURVEYS AND PLANS.....F. W. Berry, Jr.,  
Tallahassee  
FIRST DIVISION .....R. K. Van Camp, Lakeland  
Counties—Charlotte, Citrus, Collier, DeSoto, Glades, Hardee, Hen-  
dry, Hernando, Highlands, Hillsborough, Lake, Lee, Manatee,  
Pasco, Pinellas, Polk, Sarasota, Sumter.  
SECOND DIVISION.....Leon B. Thrasher, Ocala  
Counties—Alachua, Baker, Bradford, Columbia, Dixie, Gilchrist,  
Hamilton, Jefferson, LaFayette, Levy, Madison, Marion, Suwan-  
nee, Taylor, Union.  
THIRD DIVISION.....E. K. Fogg, Chipley  
Counties—Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf,  
Holmes, Jackson, Leon, Liberty, Okaloosa, Santa Rosa, Wakulla,  
Walton, Washington.  
NORTH FOURTH DIVISION.....M. P. Philips, Jacksonville  
Counties—Clay, Duval, Flagler, Nassau, Putnam, Seminole, St.  
Johns, Volusia.  
SOUTH FOURTH DIVISION, R. L. Bow, West Palm Beach  
Counties—Brevard, Broward, Dade, Indian River, Martin, Monroe,  
Okeechobee, Orange, Osceola, Palm Beach, St. Lucie.

### Auditing Division

S. L. Walters, Tallahassee.....Auditor  
B. A. Meginniss, Attorney for the Department,  
Editor

Volume IX      April, 1932      Number 4

BE IT RESOLVED, that the Chairman be and he is hereby authorized to advertise for bids for the paying of that portion of State Road 19 in Jefferson County immediately upon receipt of approval of the United States Bureau of Public Roads.

### Convict Camp No. 34

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that Convict Camp No. 34, now situate at LaBelle, be removed to Project 948, Road 22 in Orange County, upon the completion of the work on which it is now engaged.

### Road 67—Moore Haven to Road 25

Mr. Joe Peebles of Glades County headed a delegation which appeared before the Department with reference to work on that section of Road 67 between Moore Haven and Road 25.

On motion of Mr. Logan, seconded by Mr. Lupfer, the following resolution was adopted:

BE IT RESOLVED, that the Engineer be and he is hereby authorized to make arrangements for the use of the county's drag line on the construction of the grade on Road 67 between Moore Haven and Road 25.

### Road 15—Pinellas County

Mr. Logan presented to the members a suggestion from the County of Pinellas, that the width of the road under construction in the vicinity of the Soldiers' Home on Road 15 in Pinellas County be reduced to 32 feet and be constructed of concrete instead of lime rock surface treated.

On motion of Mr. Logan, seconded by Mr. Lupfer, the following resolution was adopted:

BE IT RESOLVED, that this Department do consent to the reduction to 32 feet in the width of that section of Road 15 in Pinellas County adjacent to the U. S. Soldiers' Home, and construction thereof of concrete, provided satisfactory arrangements can be made with the U. S. Government, the county and other interested parties.

### Award of Contracts

On motion of Mr. Logan, seconded by Mr. Shands, the following resolution was adopted:

WHEREAS, this Department on April 5, 1932 received bids for the construction of certain projects and the furnishing of certain materials; and

WHEREAS, the firms and individuals hereinafter listed were and are hereby declared to be the lowest responsible bidders therefor,

NOW, THEREFORE, BE IT RESOLVED, that contracts be and they are hereby awarded for the construction of such projects and the furnishing of such materials, as follows, to-wit:

### Construction

Proj. 805,	Road 25, Hendry County, Bridges and Culverts,	
	J. D. F. Boggs.....	\$20,002.18
Proj. 1090,	Road 169, Duval County, Grading and S. T. R. B. (width to be 24' and using Florida rock)	
	Duval Engineering & Contracting Co.	11,728.23
Proj. 977-B,	Road 32, Hardee County, Bridge,	
	Paul Gilmore.....	17,243.59

### Materials

Proj. 898,	Road 4-A, Monroe County, Lumber, Lainhart & Potter.....	\$11,348.44
Proj. 896,	Road 4-A, Monroe County, Lumber, Cooney Eckstein .....	1,127.50



Proj. 900-B, Road 4-A, Monroe County, Lumber, Ansley Lumber Company.....	1,607.80
Proj. 1047, Road 18-A, DeSoto County, Lumber, Ansley Lumber Company.....	2,003.50
Proj. 1048, Road 18-A, Manatee County, Lumber, Hamill Lumber Company.....	146.41
Proj. 1049, Road 161, Manatee County, Lumber, Adkisson Lumber Company.....	2,561.08

#### Road 81—Levy County

On motion of Mr. Shands, seconded by Mr. Lupfer, the following resolution was adopted:

BE IT RESOLVED, that the Chairman be authorized to advertise for bids for the lumber necessary for bridges on Road 81 in Levy County.

#### Project 85—Road 3—Seminole County

Mr. George W. McRory appeared before the Department with reference to the letting of contract for the construction of the Lake Monroe fill and bridge. Mr. McRory was informed of the progress which is being made along this line.

#### Emergency Landing Fields

Mr. George W. McRory of Sanford took up with the Department the matter of the designation of air routes under authority granted by the last legislature and submitted a map showing nine routes which have been approved by the State Committee on Aviation, and requested that the same be tentatively approved.

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:

WHEREAS, there has been this day submitted to the Department a map showing nine air routes which have been proposed and accepted by the Committee on Aviation of the Florida State Chamber of Commerce; and

WHEREAS, four of the said routes have been investigated and approved by the Engineer for this Department,

NOW, THEREFORE, BE IT RESOLVED, that the Department does hereby tentatively approve the following airways in accordance with the provisions of Chapter 14643, Acts of 1931, all according to the specific routing shown upon a map of same this day filed:

1. Airway No. 1, Pensacola to Jacksonville.
2. Airway No. 2, Tallahassee to Punta Gorda, with extension to Fort Myers, and via Manatee, Bradenton and Sarasota.
3. Airway No. 3, Sanford to Jacksonville, via DeLand, Lake Como and Palatka.
4. Airway No. 4, Jacksonville to Miami.
5. Airway No. 5, Daytona Beach to St. Petersburg.
6. Airway No. 6, Punta Gorda to West Palm Beach, together with spur 6-A Clewiston to Miami, with Fort Myers replacing Punta Gorda as western terminus, and the emergency field which is suggested at North LaBelle to be placed south of LaBelle.
7. Airway No. 7, Williston to Jacksonville via Gainesville and Baldwin.
8. Airway No. 8, Melbourne to Williston via Orlando and Ocala.
9. Airway No. 9, Bartow to West Palm Beach via Avon Park and Okeechobee.

BE IT FURTHER RESOLVED, that the approval herein given is tentative and is subject to such changes as the Department may decide to make.

#### Duval County

Messrs. W. P. Belote and Earl P. Luce comprised a delegation from Duval County which conferred with the Department on the following matters:

1. The location of emergency landing fields in Duval County.

2. The paving of Road 169 to a width of 24 feet. They were informed that this has been decided by the Department today.

3. Asking resurfacing of that section of Road 47 between South Jacksonville and Goodby's Lake. The Chairman informed the delegation that he will confer with Mr. Hills with reference to this latter request.

#### Santa Rosa County

Mr. C. H. Overman, Chairman of the Board of County Commissioners of Santa Rosa County, appeared before the Department to inquire as to the progress of surfacing of Road 10 in said county.

#### Santa Rosa County—Road 1

Mr. Overman reported to the Department that the best offer which he has at the present time contemplates an expenditure of about \$9,000.00 for the right-of-way necessary to construct State Road 1 through Milton on the new location. He was informed by the Chairman that the Department is not in position to expend that amount for right-of-way and that the proposition must therefore be abandoned, at least temporarily.

#### Road 4—Palm Beach County

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that the Chairman be and he is hereby authorized to purchase the materials necessary for the construction of the shoulders on State Road 4 through Delray.

#### Road 8—St. Lucie County

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that the Chairman be and he is hereby authorized to purchase the materials necessary for the resurfacing of 8 miles of Road 8 west of Fort Pierce.

#### Project 870, Road 143, Palm Beach County

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that the Chairman be and he is hereby authorized to advertise for bids for the resurfacing of that section of State Road 143 between Belle Glade and Pahokee known as Project 870.

#### Project 534—Suit

Upon recommendation of the Attorney for the Department, the following resolution, on motion of Mr. Shands seconded by Mr. Lupfer, was adopted:

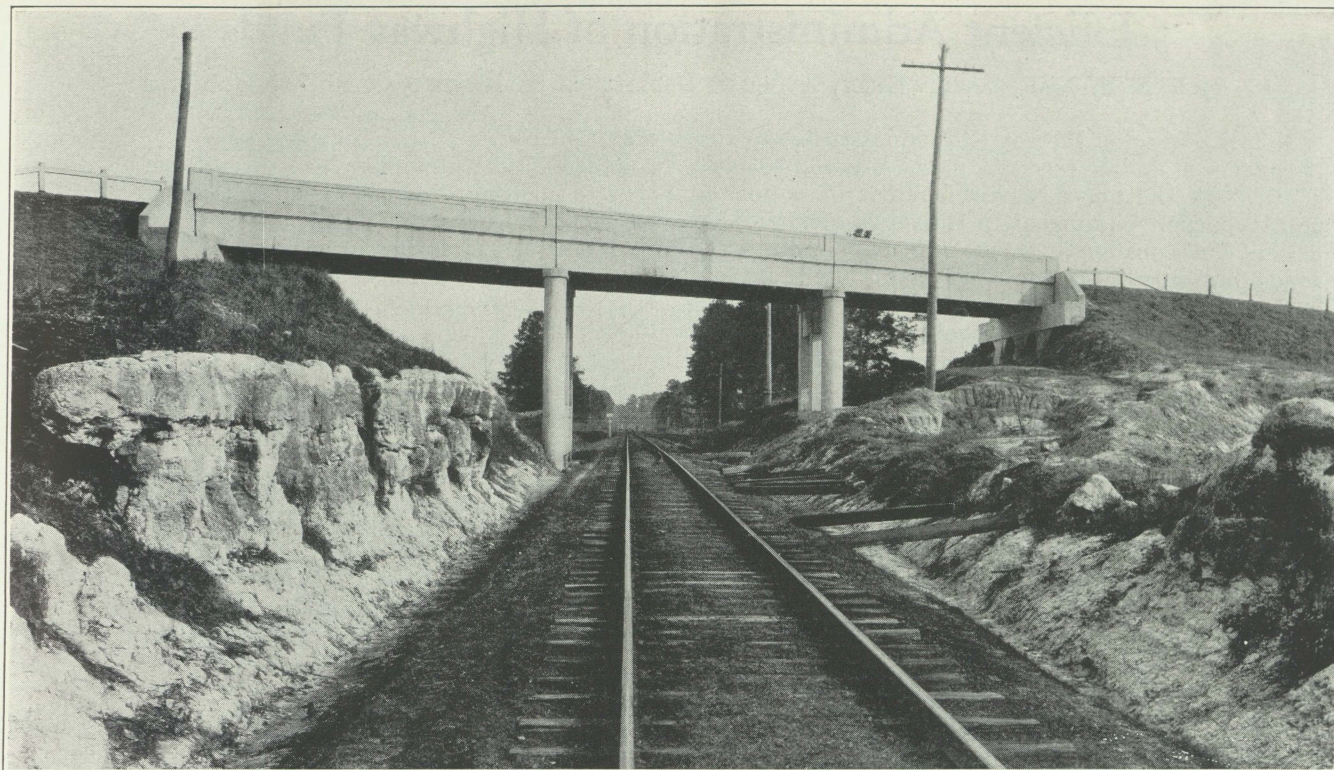
BE IT RESOLVED, that counsel for the State Road Department in the case of Massachusetts Bonding & Insurance Company vs. the Department, pending in the Circuit Court for Leon County, be hereby authorized to enter into a stipulation in behalf of the Department whereby a jury in said cause shall be waived and same submitted to the Court for trial without a jury.

#### Project 71-B

#### Claim of Okeechobee Construction Company

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:





Road 2, A. C. L. Overpass at Lowell

BE IT RESOLVED, that the Chairman and the State Highway Engineer be authorized to go into the matter of the claim of Okeechobee Construction Company with the claimants this afternoon touching everything involved except the detour bridge.

#### **Project 33, Road 2—Alachua County**

On motion of Mr. Shands, seconded by Mr. Logan, the following resolution was adopted:

BE IT RESOLVED, that the Engineer be and he is hereby authorized to undertake the widening of the shoulders on Project 33 between Paradise and Gainesville, Road 2, Alachua County.

#### **Expense Accounts Approved**

On motion of Mr. Wells, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that the expense accounts of the members be and the same are hereby approved.

#### **Project 57**

##### **Claim of Huffman Construction Company**

The Chairman called the attention of the members to the claim which has been presented by Huffman Construction Company in connection with the construction of Project 57, Nassau and Duval Counties.

On motion of Mr. Shands, seconded by Mr. Lupfer, the following resolution was adopted:

BE IT RESOLVED, that the claim of Huffman Construction Company in connection with Project 57, Road 3, be and the same is hereby referred to the Chairman, Engineer, Attorney for the Department, and Mr. George B. Hills for investigation and report.

#### **Project 722—Road 43—Jefferson County**

The Chairman again directed the attention of the members to the claim of R. J. Carroll in connection with the construction of Project 722. The Engineer

stated that in his judgment the claim should now be paid, in view of recent action of the Department along similar lines.

On motion of Mr. Shands, seconded by Mr. Logan, the following resolution was adopted:

BE IT RESOLVED, that the Engineer be and he is hereby authorized to settle the claim of R. J. Carroll in connection with the construction of Project 722, Road 43, Jefferson County.

#### **Road 90—Jackson County**

Messrs. C. N. Horne and O. L. Olive of Jackson County appeared before the Department with reference to maintenance of State Road 90. They were informed that the Department will take the same over for maintenance as far as it is constructed up to State specifications.

#### **Project 1016—Road 29—Kissimmee River Bridge**

On motion of Mr. Lupfer, seconded by Mr. Shands, the following resolution was adopted:

BE IT RESOLVED, that the Chairman be and he is hereby authorized to advertise for bids for the construction of the bridge across Kissimmee River, on Road 29.

#### **Allocation of Costs of Tests**

On motion of Mr. Shands, seconded by Mr. Lupfer, the following resolution was adopted:

BE IT RESOLVED, that the Auditor for this Department be and he is hereby authorized and directed to allocate to the respective projects on which tests were performed during the years 1930 and 1931 the costs and expenses in connection with such tests.

On motion of Mr. Shands, seconded by Mr. Logan, the Department was adjourned to meet at Tallahassee on call of the Chairman.



## Efficient Administration of Highway Funds

By R. H. BAKER, Commissioner, Tennessee Department of Highways and Public Works

IN THE DAYS of the horse-drawn vehicle, the dirt, gravel or macadam road was adequate. Today, through the amazing development of motorized transportation equipment, a universal demand has arisen for constantly increasing expenditures on roads, not only for roads of primary interstate and intercounty importance, but also for intracounty service to the most remote rural sections—a demand which can be tolerated only because of its inception with the taxpayer himself.

Road construction, improvement and maintenance, for which billions of dollars are being expended, has become the biggest business of this country. It is the business affecting directly and indirectly the greatest number of people. It is a business through which tens of millions of dollars annually may be wasted and become of no benefit to the taxpayer without intelligent and efficient administration of highway funds.

An efficient highway organization is of prime importance in the efficient administration of funds. The states and counties present many variations in the form of highway commissions, which usually take one of two general forms, the commission of three to fifteen men or the single commissioner. The type of commission is of minor importance, provided the commission or commissioner realizes fully the responsibility imposed and meets this responsibility intelligently.

The importance of the selection and training of the personnel of the department cannot be overemphasized. It should be realized that an engineer's salary, whether he be chief engineer, resident engineer, inspector or maintenance supervisor, can be lost many times over in the course of a year if the employee is ignorant or even careless in the handling of his work. It is most economical to investigate thoroughly each applicant, before offering employment, to determine his qualifications, and after employment to keep his service record carefully. Whenever possible, merited promotions should be made within the organization.

In the selection of employees, every man should be made to realize that his position is one of public service, requiring fair and impartial consideration of demands of the people whose servant he is, and honest and intelligent action without fear or favor. Satisfactory public service requires tact and diplomacy, qualities which seldom mix with the technical training of the average engineer, but essential qualities nevertheless for the engineer who is to occupy any responsible position in a state or county road department. I have sincerely said many times that I would prefer for a division engineer a combination of diplomacy and mediocre engineering ability, to a tactless but highly trained technician. The field engineer is the contact between the road department and the public. By him the department is largely judged and supported, or not, as the case may be. The value of efficiency and the proper attitude on the part of the field engineer cannot be overestimated.

Efficient administration also requires uniformity in the control of the organization in handling the

many problems, both simple and complex, confronting the highway administrator. It is therefore necessary to maintain a constant contact throughout the entire organization and to require the immediate response of all employees to orders and policies originating with the administrator.

It is often overlooked that the contractors employed on highway construction also form a vital part of the organization. Highway funds cannot be economically and efficiently expended, nor can the requisite traffic service be rendered the public, when inefficient, unreliable and irresponsible contractors are employed. Also, the most effective way to destroy an efficient engineering organization is to employ the kind of contractor who must be forced by coercion and every other possible means to do the work he has contracted to do.

In addition to the organization and personnel of the department, be it state or county, the three most important major policies affecting the efficient administration of highway funds are the following:

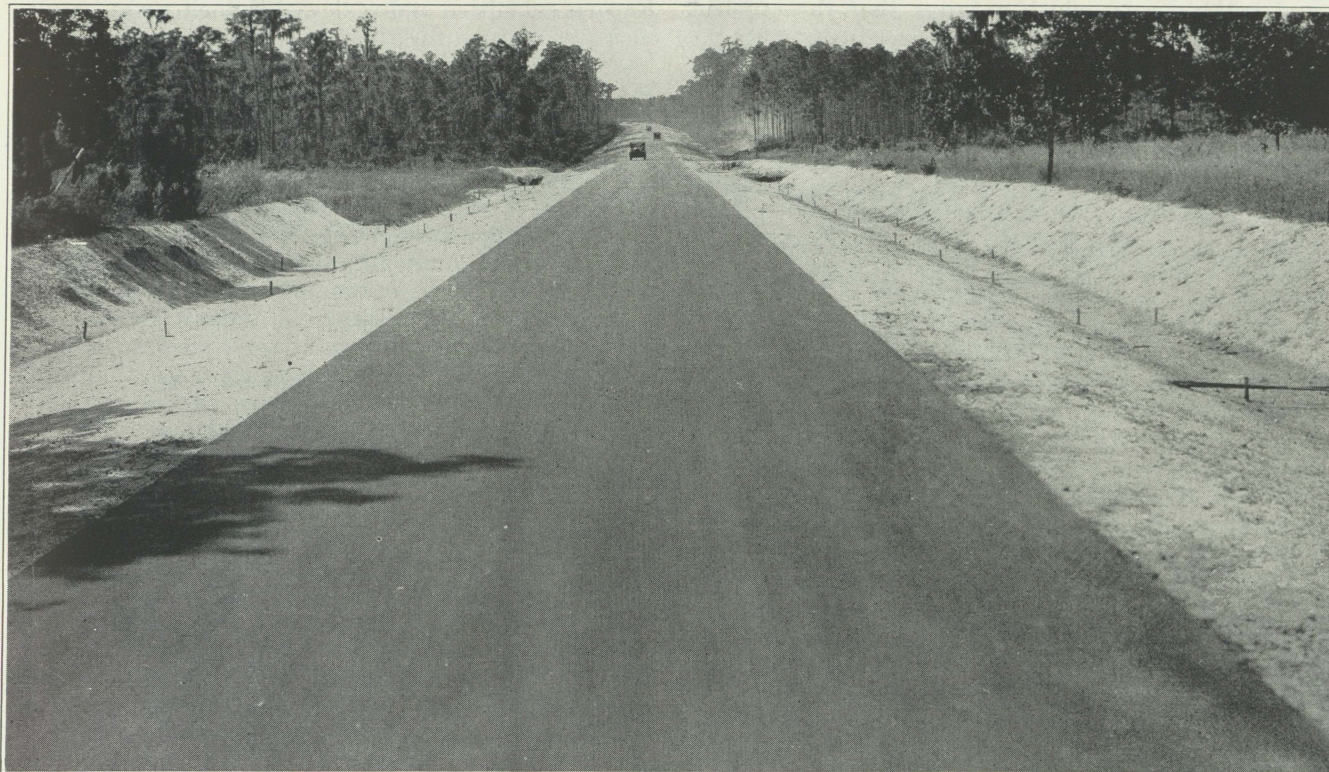
1. Budgeting and administering maintenance funds to provide adequate traffic service and prevent depreciation of previous investments.
2. Construction planning and management to coordinate properly the entire construction program.
3. Preparation of accounting and statistical reports to keep the highway administrator informed of the operations and financial condition of the department.

Maintenance is the first obligation in the efficient administration of highway funds. It should be planned and executed with the greatest care. Maintenance methods and the results obtained should be studied with the purpose of bettering the results and lowering costs. Traffic service, the only excuse for the operation of any road department, is dependent upon maintenance. Any bond issue for roads would be not only an unsound investment but a criminal imposition on the taxpayer as well, unless adequate provision is made for maintenance of the roads constructed.

Maintenance should be carefully and definitely budgeted and the required funds set aside before any determination is made of the funds available for construction. It is easy to waste funds in maintenance work. Maintenance forces contain many men who are either ignorant or extravagant in the use of public funds. Maintenance forces are so scattered that thorough supervision by capable employees is difficult to obtain economically; however, as added mileage is improved and constructed, maintenance work increases in volume and becomes easier to handle economically and efficiently.

Many inexcusable mistakes have been made in construction planning and management. Economical highway construction and proper traffic service depend upon a properly planned highway program and upon specifications and inspection which permit the exercise of every economy consistent with the results desired. In many cases, tremendous financial losses, through unwarranted traffic interruption and because of investments in roads lying idle while other sections were being built, might have been avoided





Federal Aid, Road 17, Macasphalt On Rock Base

had proper consideration been given to construction planning and management.

Construction planning should provide these things:

1. The best possible service to traffic over completed or partially completed routes.

2. Returns on the investment, in terms of traffic service, simultaneous with the completion of each section or link.

3. A safeguard against closing expensively constructed roads because of lack of forethought in providing for some other controlling section.

4. The most economical plan to give the desired results at the lowest possible cost.

5. Plans, in many cases, for the ultimate standard and type, even if necessary to provide it stage by stage over a period of years.

Specifications and inspection uniformly interpreted and applied, should permit the exercise of the following principles: (1) the most economical construction practices possible, (2) use of the most economical materials available which give the desired result, (3) that contractors use their own ingenuity and initiative in producing the required construction at the lowest cost and (4) elimination of the "personal" requirements of the engineer and inspector.

The most important single factor in the efficient administration of highway funds is the submission of comprehensive monthly fiscal and statistical accounting reports to the highway administrator. Eight primary functions of accounting reports may be set out as follows:

1. They give control over the allotment of anticipated annual income to projects, functions and activities of the highway department of the state or county.

2. They provide for development of an annual program at a rate that will avoid maturity of accounts before income is collected.

3. They permit full control over construction and maintenance programs, as regards overexpenditure by subordinates.

4. They allow comparison of administrative costs incurred by districts or divisions.

5. They make possible better control over the purchase and use of equipment and supplies.

6. Preparation of monthly reports requires a degree of teamwork among the various units which is rarely secured without closure of accounts at regular intervals.

7. Such reports, when properly prepared, provide the administrator with general financial statements, but they may be supported with such detailed statements as may be essential.

8. While some additional expense is incurred at the outset, the monthly analysis enables the head of the department to develop a compact, smooth-functioning organization and to defend his results against partisan criticism.

It is generally conceded to be a necessary evil—not without its occasional virtue—that political changes seriously affect the efficiency of a highway organization; but governors, legislatures, county courts and state and county road officials are, as a rule, jealous of obtaining for themselves reputations for efficiency in government and administration. It is therefore surprising that occasionally the official is found who is afraid to require a change, even for the better, because he fears the period of transition or thinks that the things good enough for his predecessor—who made a reasonably satisfactory showing—are good enough for him. Such officials have no place in the nation-wide movement for more



and better roads, which requires that the efficient administration of road matters keep pace with the demands of the people expressed by taxes, appropriations and bond issues for road purposes.

An adequate plan of fiscal, statistical and cost accounting not only produces the most excellent tangible results in the operation of a highway department, but it also relieves the department head of the continuous mental strain caused by worry over uncertainties, a type of mental anguish well known to all highway commissioners. In addition to the advantages of accounting reports already discussed, they eliminate differences in viewpoint between the supervising engineer and the highway administrator, they have a strong moral effect on every employee, they require care in the compilation of estimates, they place responsibility for all deviation from estimates and they require strict accounting and the proper charges for the use of every piece of equipment owned and operated by the highway department.

In many cases the present organization of the state or county highway department is the result of a year-to-year growth for the purpose of handling the year-to-year increase in duties and responsibilities. In very few cases has a department submitted to a thorough reorganization for the purpose of administering its affairs more efficiently. Ledgers have been added for this purpose and that purpose, without proper regard for the accounting problem as a whole and without a general revamping of the system for the purpose of handling the greater volume of work more efficiently. Many highway administrators receive various and sundry accounting reports, many of which are filed without even a casual analysis.

Reports submitted and reviewed in such a way result in a loss of time for those preparing the reports, a loss of time for the administrator who receives from them no useful information and a distinct blow to the prestige of the administrator who requires this extra work from which no benefit is received.

The reorganization of a highway accounting system requires additional expense at the outset. As soon as the new system begins to operate, however, real economy should be obtained. The installation and operation of the system must be supervised by a person thoroughly familiar, not only with accounting, but with all activities of the highway department as well. Once the system is organized, the preparation of all reports should become purely routine.

Accounting reports to the administrator are intended to serve as a basis for formulating executive decisions. They should therefore be made in a form that will present accurate and comprehensive information with as little sacrifice of effort and time and as little delving into details as possible. Information should be summarized. The report should be summarized to show variations between estimated and actual costs. It must show the financial condition of the department in summary form, supported by details. Revenues should show sources and amounts. Expenditures should be shown by funds and purposes. Statistical information should include the classes, types and quantities of work performed. Cost-accounting reports should include current costs, costs in past periods and estimated costs by classes and types. The internal budget, a most important guide for the administrator, is necessary for the proper allocation of funds.

—Better Roads.

## Jobs for 700,000 at Stake in Road Bill Before Senate

**Measure Coming Up for Vote at an Early Date Involves \$136,000,000 Advance to States—Many Vast Organizations Confident of Enactment**

**J**OBBS for nearly 700,000 men and the food and shelter of 2,000,000 persons are involved in a bill slated to come soon before the United States Senate for action.

It is the \$136,000,000 emergency highway construction bill which has the unqualified backing of the American Legion, the American Farm Bureau Federation, the National Grange, National Rural Letter Carriers, American Motorists Association, and the American Road Builders' Association.

Conceived upon the same principle as the \$80,000,000 emergency road appropriation made available last year, the bill is designed to thaw the frozen credit of the various States which prevent them from immediately matching available Federal-Aid highway funds. The measure already has been passed by the House and reported favorably in the Senate.

Confidence of favorable action on the appropriation among the organizations unqualifiedly backing its enactment is based upon several factors. These are:

That both parties in the last Congress went on record as favoring the principle of the measure as reflected in the ready approval given the \$80,000,000 emergency fund more than a year ago.

The strong advocacy of the earlier bill by President Hoover and his unfailing endorsement of highway construction as a means of absorbing the slack of unemployment.

The established fact that 691,000 men, including many in agricultural communities, will be given part-time employment over a considerable period. The allocation of the fund is such that its benefits will reach the unemployed in all parts of the country.

Universal recognition of the directness of the unemployment relief involved. In this connection, figures of the United States Bureau of Public Roads are cited to show that 85 cents of the dollar spent for highway construction goes straight to the hands of the wage earner.

Another element creating confidence that the Senate will approve the bill is the fact that the \$136,000,000 represents merely an advance to the various States with definite provision made for its repayment.

Support for the measure by the organizations unitedly demanding its enactment is based upon the immediacy and certainty of the unemployment relief it provides. In this connection, Senator Tasker L.



Oddie, Nevada, leading the fight for the bill in the upper house of Congress, says:

"The maximum number of persons employed on emergency highway work as a direct result of the \$80,000,000 Federal emergency appropriation in 1931 was 115,167 persons, according to the United States Bureau of Public Roads. On the same basis the emergency appropriation as now proposed would employ 172,750 persons, but since staggering of employment is being very generally used in highway emergency work, this number would likely be doubled or 335,000 persons would be directly employed.

"For every man engaged on the highway there are two men engaged in the production of road building equipment and materials, in the factories or mines, and the transportation of them. Taking into consideration, then, that for each man directly employed there are two men behind the lines, the total number engaged by reason of the appropriation would possibly be three times the net number of 172,750 directly employed on the highway plus the additional 172,750 road workers alternating in staggered work or a grand total of 691,000. Further, assuming that an average family consists of three, more than 2,000,000 persons may be reached by reason of the emergency appropriation."

## Most All of Road Dollars go to Labor

Road Construction Is One of Best Ways of Meeting Unemployment, Says Markham

**"W**ITHOUT question one of the best ways of providing jobs is the construction of highways since as much as 91 cents of every dollar received by the contractor goes into the pockets of labor."

This statement was made by W. C. Markham, executive secretary of the American Association of State Highway Officials.

Mr. Markham said: "The severity of unemployment is very greatly dependent upon road building. If in the near future highway building funds were reduced unemployment could be expected to increase materially. However, if road building is maintained at the pace it progressed last year, many thousands of men will be kept at work and away from the need of charity.

"Recently the Bureau of Public Roads made a very careful analysis of the break-up of the dollar spent for concrete pavement. The Bureau learned that 91 cents of the contractor's dollar goes to labor and through a large number of channels, a fact that benefits many workmen and adds to the desirability of providing road work as a means for combating unemployment.

"The money spent directly by the contractor for labor is only the beginning. The contractor, directly and indirectly, pays out more than a third of his dollar for transportation of materials and equipment and hauling means an extensive use of labor. When he buys his materials and equipment he is also paying for great volumes of labor required in manufacturing and production.

"Therefore, it is easy to see that labor is benefited as follows in the spending of the contractor's dollar: Directly on the road job, 14.45 cents; from transportation of materials and equipment, 17.5 cents; from the production of miscellaneous materials and equipment, 16.22 cents; from reinvestment by property owners, 13.85 cents; from the production of cement, 6.1 cents; from the production of aggregate, 5 cents; from the purchase of new equipment, 5.27 cents; and from miscellaneous items, 7.18 cents.

"The dollar benefits many people in its travels. Both the states and the Federal government, through Federal Aid, must devote every dollar possible to road construction, if they would take the best means of placing men at work," concluded Mr. Markham.

### FATIGUE IS FACTOR IN AUTO ACCIDENTS

Commercial Vehicle Operators Limit Working Hours of Drivers to Reduce Costly Mishaps

Motorists who boast about the large number of miles they drive between sun up and sun down probably have frequent opportunities to do their boasting in the hospital if studies made on fatigue by operators of commercial vehicle fleets are any indication.

Fatigue, caused by lack of sleep or long working hours, is a highly important accident factor, according to the National Safety Council. More automobile accidents occur during the late afternoon hours when workers are going home than in the morning when they are driving to work. Cross-country truck drivers are more prone to accidents during the late hours of the day.

Recognizing the hazard of fatigue, many firms operating taxicabs, buses and trucks have placed definite limits on both the mileage and the hours which their drivers may work, the Council says. One of the most revolutionary moves along this line is shown in a recent order sent to all its regional managers by one of the largest bus companies in the country. It says:

"A. When a driver has completed a trip or tour of duty requiring him to drive a distance of 150 miles or more, he must not be permitted to make a return trip or go on any other trip or tour of duty until he has had at least eight hours of rest.

"B. Regardless of the number of miles driven, when a driver has completed a trip or tour of duty and has had to be on duty eight hours or more, he must not be permitted to make a return trip or go on another trip or tour of duty until he has had at least eight hours of rest."

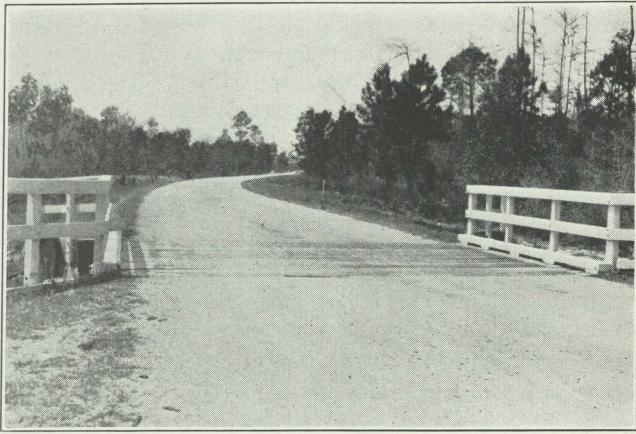
Safety authorities agree that traffic accidents would be materially reduced if private drivers would place themselves under similar restrictions.—Georgia Highways.

### A Joke on Casey

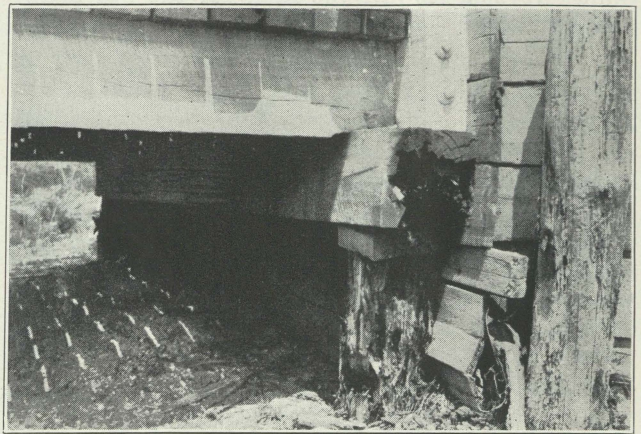
Murphy: "What's that in your pocket?"

Pat (in whisper): "Dynamite. I'm waiting for Casey. Every time he meets me he slaps me on the chest and breaks me pipe. Next time he does it, he'll blow his hand off."

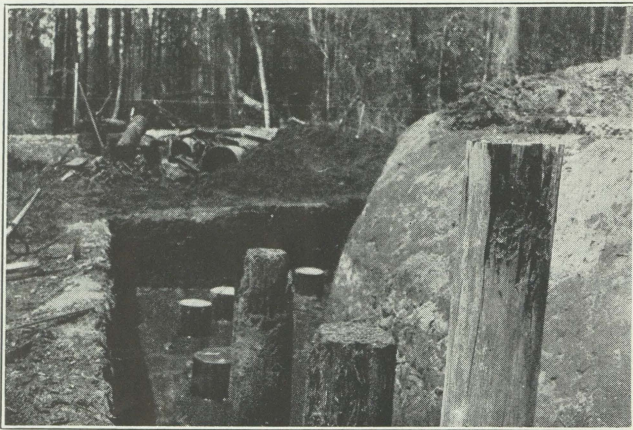




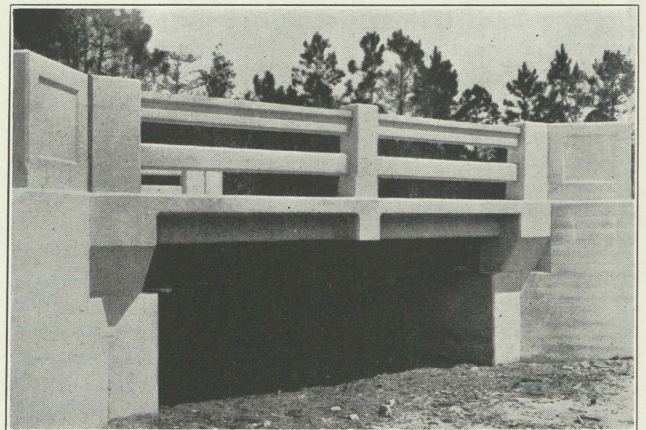
An old single span timber bridge.



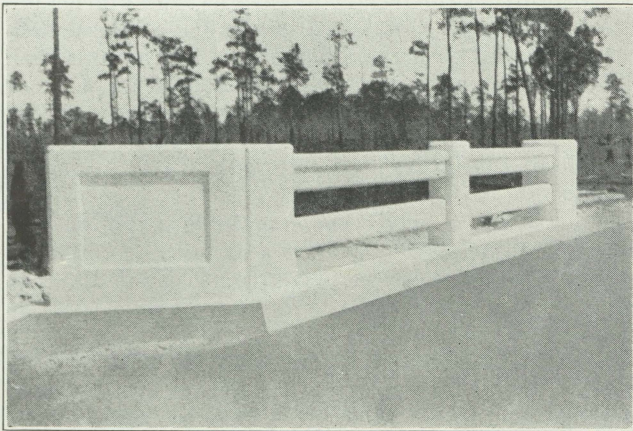
View showing deterioration of the timber.



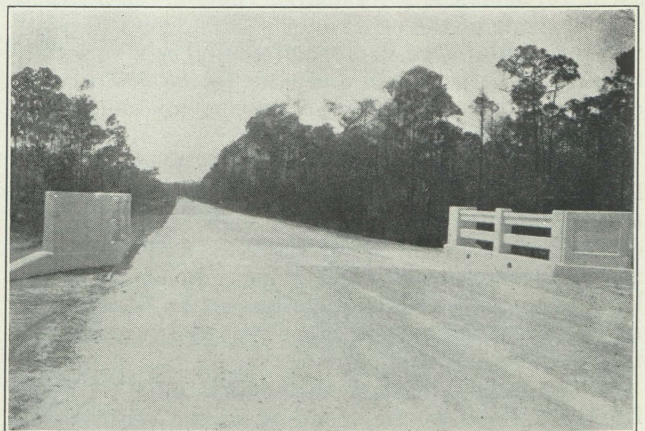
Old piling to be cut off below ground.



Side view of a new structure.



The new concrete handrail.



A reconstructed bridge.

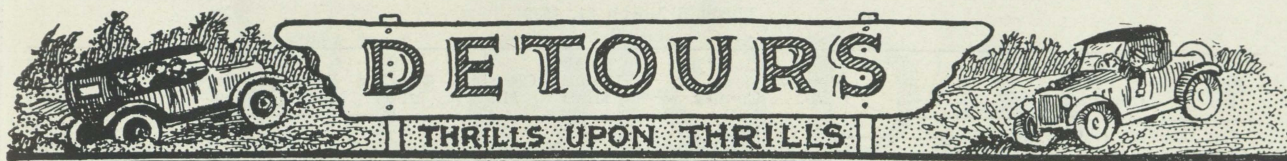
## Rebuilding Old Timber Structures on State Road No. 10

As a betterment item in this year's budget the Department is rebuilding five of the untreated timber structures on Road No. 10, Wakulla County, that were built by the Road Department in 1925. The maintenance forces had reported these bridges unsafe for traffic due to the deterioration of the timber and an examination showed the structures to be beyond repair. The only material that was satisfactory for reuse was the part of the piling below the moisture line so the Department's Engineers decided

to construct a light concrete abutment using the old piling, cut off several feet below the ground, as the foundation piling. On this substructure were placed steel stringers and a concrete floor and handrail. The old width of roadway was increased to 24 feet thereby making this popular Coast Road safer for modern high speed traffic.

This reconstruction is being done by State forces under the direction of M. N. Yancey, Maintenance Engineer in this Division. Plans were prepared in the office of the Bridge Engineer.





### Some Parents Are So Careless

"Speaking of signs," writes W. P., "I remember once standing in front of a grocery store and noticing the sign, 'A Swindler,' on the window. Entering, I asked the proprietor if it wouldn't look better if, instead of 'A,' he printed his full Christian name."

"'No,' he said, 'it would look worse. My first name is Adam.'"—Georgia Highways.

### No Thumbs Down

"Bothered much by hitch hikers when you're out riding?"

"Not now. Tried a new plan. As soon as I get out of town I show the sign 'Taxi' on my car."

—Boston Transcript.

### Dolce far Niente

"Jones always strikes me as an indolent sort of chap."

"Indolent? Why that fellow is so lazy he always runs his automobile over a bump to knock the ashes off his cigar."—Boston Transcript.

Traffic Cop: "Don't you know that you must give the lady one-half of the road?"

Motorist: "I always do, when I find out which half she wants."

An angry woman rushed into the registrar's office. In her hand she bore a license. To the registrar she said:

"Did you, or did you not, issue this license for marryin' me to Albert Briggs?"

"Yes, I believe I did. Why?"

"Well, what are you going to do about it?" she demanded, "he's escaped!"

### The Worm Turns

When the clock struck the midnight hour, father came to the head of the stairs and in a rather loud tone of voice said: "Young man, is your self-starter out of order tonight?"

"It doesn't matter," retorted the young man, "as long as there's a crank in the house."

### Help

"I married a widow who had a grown daughter. My father visited our house very often and fell in love with my step-daughter and married her. So my father became my son-in-law and my step-daughter my mother, because she was my father's wife. Sometime afterwards my wife had a son: he is my father's brother-in-law and my uncle, for he is the brother of my step-mother. My father's wife, namely my step-mother, had a son: he is, of course, my brother, and in the meantime my grandchild, for he is the son of my daughter. My wife is my grandmother because she is my mother's mother. I am my wife's husband and grandchild at the same time, and as the husband of a person's grandmother is his grandfather, I am my own grandfather."

An old lady approached a porter at a busy railway station.

"Can you tell me when the next train leaves?" she inquired.

"Where do you wish to go?" the porter asked.

"That's none of your business," was the old lady's tart reply.

"But I can't tell you when the train leaves if I don't know where you are going," the porter explained.

"Well," said the old lady, "if you must know, I'm going to Cleveland."

The porter then told her when the train left, and soon after he saw her looking out of the carriage window.

"Ha, ha!" she laughed, "I've tricked you this time. I'm not going to Cleveland. I'm going to Buffalo."

History Professor—"And when Lord Chesterfield saw that death was near, he gathered all his friends around him. But before he breathed his last he uttered those last immortal words. Who can tell me what the dying words of Lord Chesterfield were?"

Class (in chorus)—"They Satisfy."

### Bridge Engineer Needed

A charming wife of a French diplomat had never thoroughly mastered the English language.

She was urging an American officer to attend a dinner, the invitation to which he had already declined. The lady insisted that he must go, but the young officer said that he had burned his bridges behind him.

The lady misunderstood the word. "That will be all right," she explained. "I'll lend you a pair of my husband's."

—Selected.

"Dark and stormy night and the old engine was coming down the track whistling, puffing and flapping its ears—"

"Hold on, Pete; an engine hasn't ears."

"Certainly it has; engineers."

—Selected.

"We had an explosion at our house today."

"What caused it?"

"My wife."

"How did she cause it?"

"A smile lit up her face and the powder exploded."

Irate Parent—"Didn't I see you kiss my daughter, sir?"

Nervy Youth—"How should I know? Do you think I'd be gawking around when I was doing a thing like that?"



# Status of Road Construction

Through March 31, 1932

Proj. No.	Contractor	Road No.	County	Total Length Miles	Clearing Miles	Grading Miles	Base Miles	Surface Miles	Type	Per Cent Complete
3-A	McVay Lindsay & Son	218	Okaloosa	9.17	9.17	6.00		6.00	Sand Clay	40.00
60-A	Convicts	4	Flagler-Volusia	11.76	10.44	8.28			Grading	70.00
79-A	Convicts	4	Duval	13.31	8.65	6.25			Grading	55.00
83	E. F. Powers Const. Co.	5	Sarasota	9.20			9.20	4.00	R.B.S.T.	91.00
623	State Forces	35	Madison	12.13				4.00	R.B.S.T.	90.00
702	Convicts	10	Franklin	7.50	6.00	4.00			Grading	78.00
706-B	State Forces	28	Putnam	14.91				6.00	R.B.S.T.	92.00
737	Convicts	39	Washington	11.00	5.50	2.00			Grading	20.00
779	Convicts	19	Liberty	8.00	8.00	7.60			Grading	95.00
793-C	Convicts	15	Citrus	6.45	4.84	1.00			Grading	30.00
793-D	Convicts	15	Citrus	7.99	7.00	6.79			Grading	90.00
797	Convicts	13	Nassau	9.60	9.60	9.41			Grading	98.00
805	Convicts	25	Hendry	9.51	9.51	9.23			Grading	97.00
806-C	State Forces	25	Hendry	11.00				5.60	R.B.S.T.	95.00
806-D	State Forces	25	Hendry	12.69				7.00	R.B.S.T.	95.00
826	Convicts	88	Holmes	10.00	7.00	3.50			Grading	35.00
832	State Forces	10	Santa Rosa	16.01				4.50	Sand Asph.	30.00
834	Convicts	52	Jackson	16.04	7.00	6.00			Grading	40.00
868-A	State Forces	5	Levy	7.34				3.00	R.B.S.T.	90.00
868-C	State Forces	5	Levy	12.71				5.00	R.B.S.T.	88.00
873	Raiford Convicts	49	Baker	10.78	5.39	3.99			Grading	33.00
875	Convicts	23	Hernando	10.14	10.14	9.52			Grading	96.00
876-C	State Forces	78	Duval	19.17				11.50	R.B.S.T.	96.00
892	Fred D. Beasley, Inc.	30	Indian River	14.16			14.16	14.16	R.B.S.T.	100.00
902	Convicts	70	Sumter	12.33	11.84	2.96			Grading	43.00
909-C	A. B. Curry Const. Co.	4-A	Dade	4.38	4.38	4.38		4.38	Concrete	100.00
947	Convicts	80	Clay	6.85	6.85	4.11			Grading	65.00
948	McVay Lindsay & Son	22	Orange	11.90			0.00	0.00	R.B.S.T.	0.00
956	Convicts	44	Volusia	5.04	5.04	2.50			Grading	48.00
974-C	Convicts	29	Osceola	18.10	18.10	8.14			Grading	55.00
977-A	Convicts	32	Hardee	6.04	4.45	2.19			Grading	25.00
1013	Convicts	25	Palm Beach	3.60	3.60	2.20			Grading	64.00
1035	Convicts	218	Bay	4.00	3.50	3.50		3.50	Sand Asph.	95.00
Total Complete February 29, 1932					3404.81	3327.17	1956.08	2933.03		
Complete month of March, 1932					20.77	18.32	.24	28.70		
Total Complete March 31, 1932					3425.58	3345.49	1956.32	2961.73		

TOTAL MILEAGE COMPLETE										
	Concrete	Brick	B.C.	S.A.	B.M.	Asp.B.	S.T.R.B.	S.T.S.C.	Macasph.	
Complete to February 29, 1932	437.99	21.63	54.26	114.61	109.57	23.70	1635.02	362.52	16.99	
Complete Month of March	.06						1.23			
Complete to March 31, 1932	438.05	21.63	54.26	114.61	109.57	23.70	1636.25	362.52	16.99	
	Sand Asph.	Sand Clay	Marl	Total						
Complete to February 29, 1932	89.34	103.66	27.58	2996.87						
Complete Month of March	5.60	1.38		6.89						
Complete to March 31, 1932	94.94	105.04	27.58	3003.76						

# Status of Bridge Construction

Through March 31, 1932

Project No.	Contractor	Road No.	County	Total Length Feet	Type	Percent Complete
57	C. G. Kershaw Contr. Co.	3	Nassau-Duval	1067.0	Concrete	5.00
60-B	Fred D. Beasley, Inc.	4	Flagler-Volusia	461.54	Concrete	100.00
66	R. C. Huffman Const. Co.	5	Sarasota	458.57	Concrete and Steel Span	99.75
75	National Surety Co.	27	Collier	561.31	Concrete	100.00
669-W	State Forces	27	Collier	1020.00	Timber	100.00
779-B	R. J. Arrington & Son	19	Leon-Liberty	731.00	Timber and Concrete	40.00
875-B	C. T. Felix	2	Sumter	700.00	Timber and Concrete	4.00

# CONTRACTS AWARDED BY STATE ROAD DEPARTMENT

January 1 to April 16, 1932

## STATE PROJECTS

Proj.	Road	County	Contractor	Length Feet	Length Miles	Contract + 10%	Type
718-B	5-A	Alachua-Columbia	John Johnson	216		24,292.45	Concrete
819-B	54	Okaloosa	Penton-Mathis Const. Co.	3087		95,964.54	Timber
695-C	2	Lake	Coastal Roads Co.		2.33	63,599.40	Bit. Conc.
960	67	Glades	Wilson & Walter		6.19	36,695.02	Grade
977-B	32	Hardee	Paul Gilmore	217		18,867.94	Concrete
805	25	Hendry	J. D. F. Boggs	351		22,002.39	Concrete
1090	169	Duval	Duval Engr. & Contr. Co.		.67	14,883.29	R.B.S.T.
Sub Total				3,871	9.19	\$ 276,305.03	

## FEDERAL PROJECTS

Proj.	Road	County	Contractor	Length Feet	Length Miles	Contract + 10%	Type
72-D	28	Putnam-Flagler	Powell Brothers	313		37,131.79	Concrete
53-D	2	Lake	Coastal Roads Co.		4.83	149,749.01	Bit. Conc.
Sub Total				313	4.83	\$ 186,880.80	
Grand Total				4,184	14.02	\$ 463,185.83	